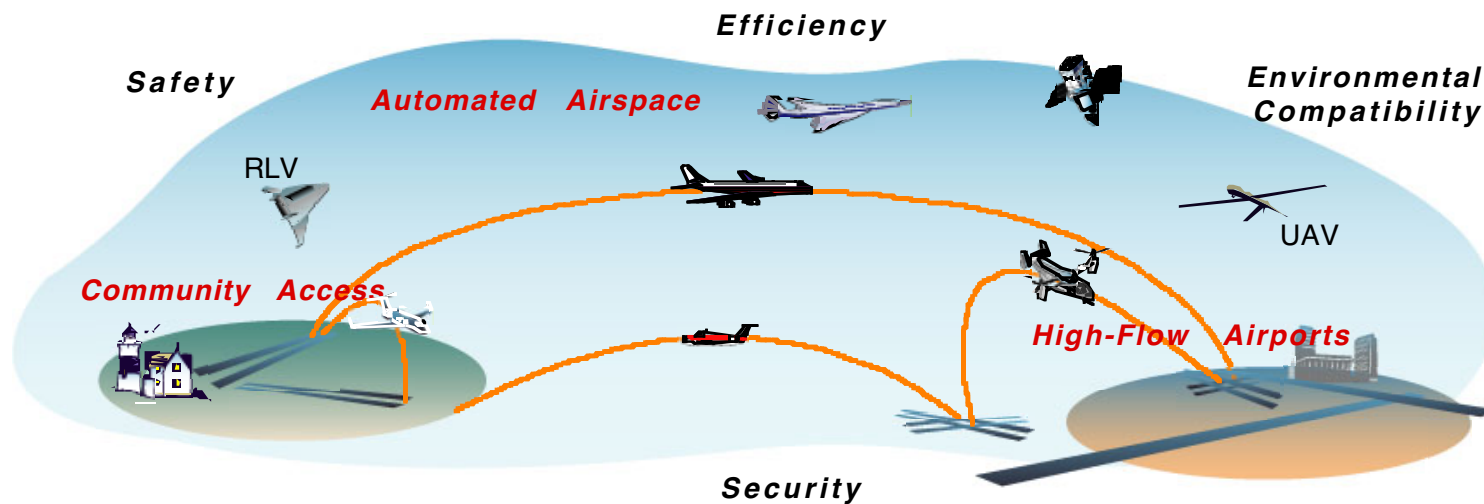


VIRTUAL AIRSPACE MODELING AND SIMULATION

Technical Interchange Meeting II



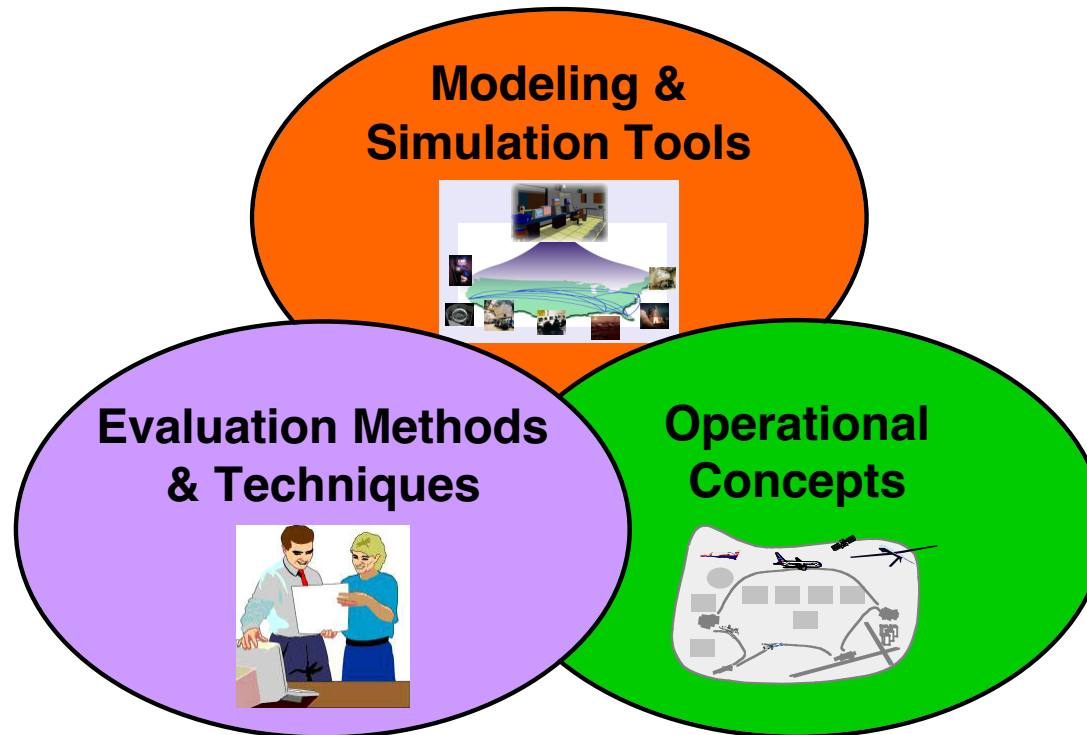
Harry Swenson
Project Manager
NASA Ames Research Center

August 27-28, 2002

Project Vision

The Virtual Airspace Modeling and Simulation Project will provide the technologies and processes for conducting trade-off analyses amongst future air transportation system's concepts and technologies

Virtual Airspace Modeling & Simulation - TIM #2

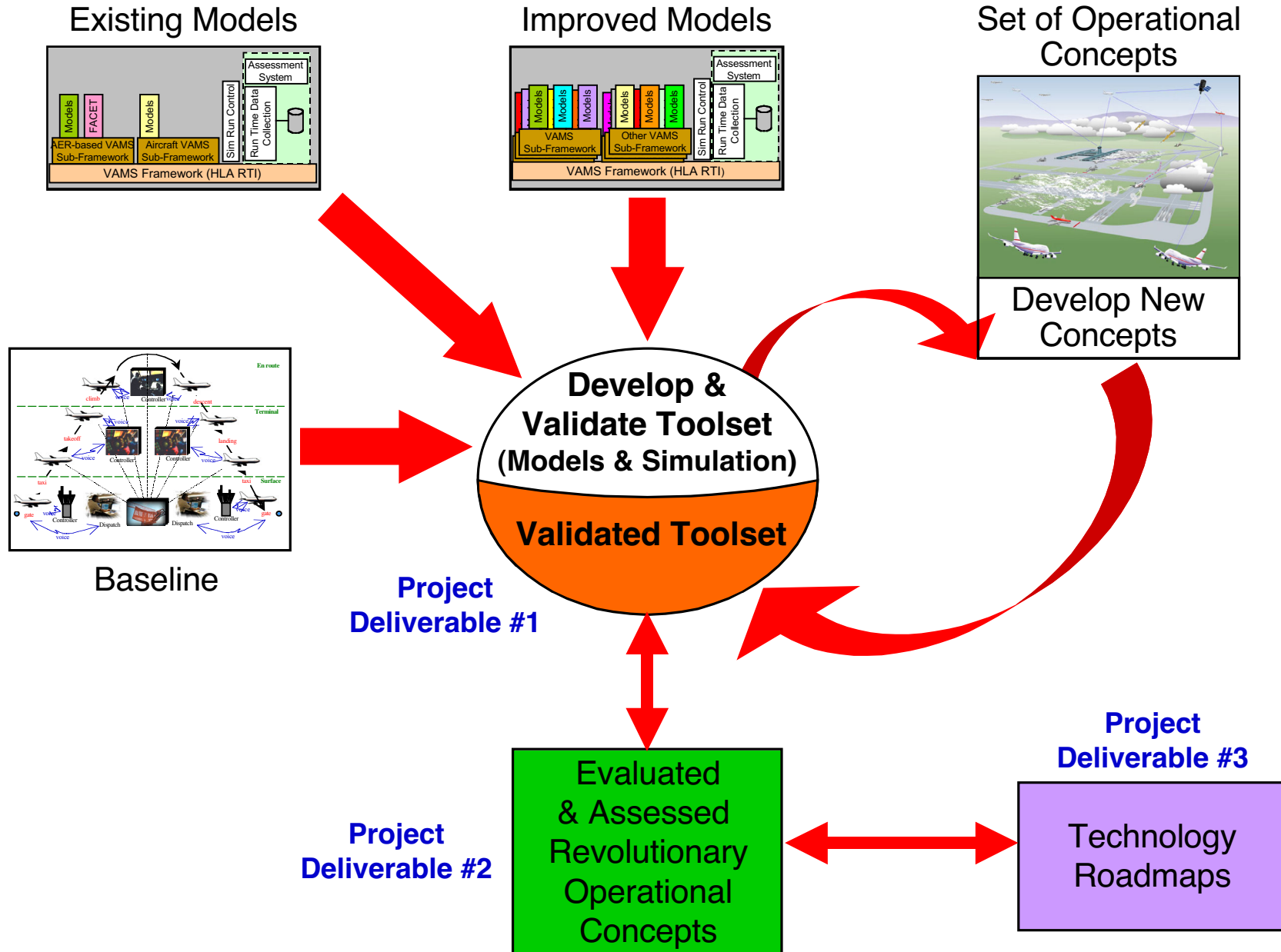


VAMS Technical Objectives

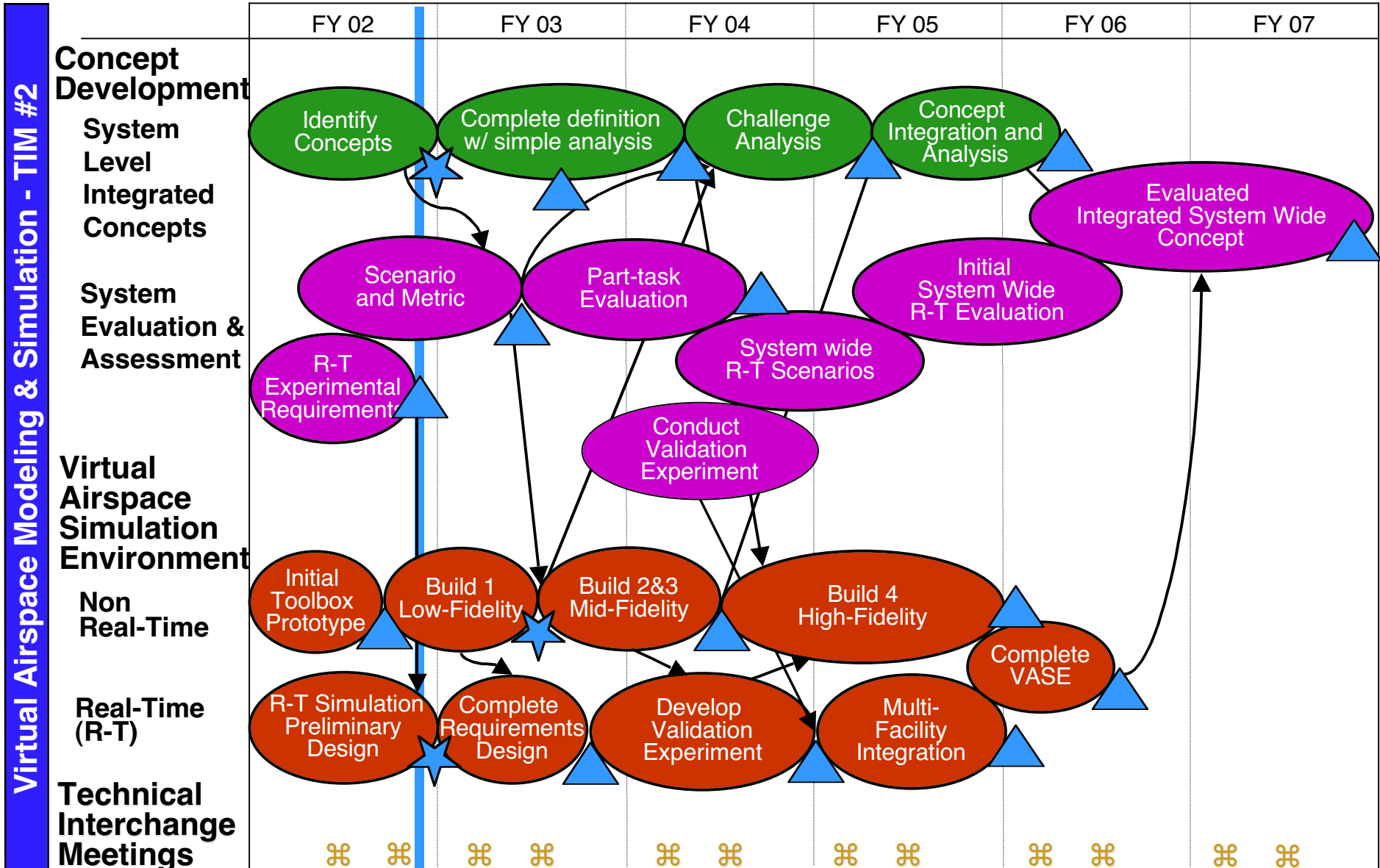
- **Develop and validate modeling and simulation tools providing the multi-objective (safety, capacity, cost) trade space to analyze air traffic management (ATM) concepts.**
- **Create operational concepts and conceptual architectures that can be used to define the next generation air transportation system, and develop technology roadmaps, to meet long-term Enterprise goals.**
- **Develop operational scenarios, metrics and evaluation methodologies to assess potential operational concepts and technologies to meet the forecasts across the trade space.**

Technical Approach

Virtual Airspace Modeling & Simulation - TIM #2



VAMS Roadmap



- Status
 - Concept developers have identified their Operational Concepts and prepared preliminary definitions and scenarios
 - Prototype ACES developed and demonstrated
 - VAST Initial Real-time Simulation defined
 - VAST Real-Time Simulation Preliminary Design Review Conducted
 - ACES Build 1 “VAST Non-Real-Time state-of-the-art airspace models toolbox with the ability to assess economic impact of new technology and NAS operational performance and the ability to model the dynamic effects of interactive agents” is on schedule for its delivery this fall
 - Common Scenario set development is focused and on schedule
 - FY03 Funding cut due to HQ infrastructure of \$1.8 Million will cause some refocusing of the Real-Time Simulation development effort